

Amendments to the Claims:

Please amend the claims as shown in the Listing of Claims below. This Listing of Claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-7. (Canceled)

8. (Currently Amended) A storage device having a hard disk for storing data, the hard disk including a disk medium and buffer means for writing data to the disk medium, the storage device comprising:

power supply means for supplying power to the storage device;

detecting means for detecting an operation to cut off a [[main]] power supply [[of]] from the power supply means to the storage device; [[and]]

access suspending means for suspending access to the hard disk when the detecting means detects the operation;

medium writing means for performing a writing process for writing data stored in the buffer means to the disk medium when the detecting means detects the operation; and

power cutoff means for cutting off the [[main]] power supply after a predetermined time has elapsed after the detecting means detects the operation when the writing process has already been performed by the medium writing means.

9. (Canceled)

10. (Currently Amended) The device according to claim [[8]] 24, further comprising:
a relay for generating an ON/OFF ON signal to connect the power supply means to the storage device and generating an OFF signal to [[or]] disconnect the power supply means from the storage device main power supply in response to a control signal,

wherein the [[main]] power supply is cut off by the OFF signal generated [[from]] by the relay, the OFF signal being generated based on the control signal generated after the elapse of the predetermined waiting time.

11. (Currently Amended) A hard disk protecting method for a storage device having a hard disk for storing data, the hard disk having a disk medium and buffer means for writing data to the disk medium, the method comprising the steps of:

detecting an operation to cut off a [[main]] power supply [[of]] from a power supply means to the storage device;

suspending access to the hard disk when the operation is detected in the detecting step;
performing a writing process for writing data stored in the buffer means to the disk medium when the operation is detected in the detecting step; and

cutting off the [[main]] power supply when the writing process has already been performed after the data is written in the writing step.

12-14. (Canceled)

15. (Currently Amended) A system for providing storage devices with protection from power supply cut off device having a hard disk for storing data, each storage device the hard disk including a disk medium and buffer means for writing data to the disk medium, the [[system]] storage device comprising:

power supply means for supplying power to the storage device;

detecting means for detecting a user action to cut off a power supply from the power supply means to [a] the storage device;

access suspending means for suspending [[data]] access to the storage device upon detection of said hard disk when the detecting means detects the user action by the detecting means, wherein said data access is suspended until all data in the buffer means has been written to the disk medium; [[and]]

medium writing means for performing a writing process for writing data stored in the buffer means to the disk medium when the detecting means detects the user action;

power cutoff means for cutting off the power supply to the storage device when an operation to cut off the power supply is performed by a user, the operation being performed after a detection of the user action; and

indicator means for indicating whether said user action is permitted upon detection of said user action

notifying means for notifying that the operation to cut off the power supply is not permitted in a case where the writing process has not been performed by the medium writing means and notifying that the operation is permitted in a case where the writing process has already been performed by the medium writing means.

16. (Canceled)

17. (Currently Amended) The [[system]] storage device according to claim 15, wherein said indicator notifying means [[is]] notifies whether the operation to cut off the power supply is permitted or not using an LED (Light Emitting Diode).

18. (Currently Amended) The [[system]] storage device according to claim 15, wherein said indicator notifying means [[is]] notifies whether the operation to cut off the power supply is permitted or not by using a speaker.

19-21. (Canceled)

22. (Currently Amended) A hard disk protecting method for providing a storage devices with protection from power supply cut off device having a hard disk for storing data, each storage device including the hard disk having a disk medium and buffer means for writing data to the disk medium, the method comprising:

a step of detecting a user action to cut off power supply from a power supplying means to [[a]] the storage device;

a step of suspending [[data]] access to the storage device upon detection of said hard disk when the user action in the detecting step, wherein said data access is suspended until all data in the buffer means has been written to the disk medium; and is detected;

performing a writing process for writing data stored in the buffer means to the disk medium when the user action is detected;

cutting off the power supply to the storage device when an operation to cut off the power supply is performed by a user, the operation being performed after a detection of the user action; and

a step of indicating whether said user action is permitted upon

notifying that the operation is not permitted in a case where the writing process has not been performed and notifying that the operation is permitted in a case where the writing process has already been performed.

23. (Canceled)

24. (New) The device according to claim 8, further comprising setting means for setting a waiting time required for the writing process,

wherein the power cutoff means cuts off the power supply after the waiting time set by the setting means has elapsed after the detection of the operation by the detecting means.

25. (New) The device according to claim 24, wherein the setting means sets the waiting time based on a buffer size of the buffer means.

26. (New) The method according to claim 11, further comprising setting a waiting time required for the writing process,

wherein the power supply is cut off after the waiting time has elapsed after the detection of the operation.

27. (New) The method according to claim 26, wherein the waiting time is set based on a buffer size of the buffer means.

28. (New) The device according to claim 15, further comprising setting means for setting a waiting time required for the writing process,

wherein the notifying means notifies that the operation is not permitted when the waiting time has not elapsed after a detection of the user action and notifies that the operation is permitted when the waiting time has elapsed after the detection of the user action.

29. (New) The device according to claim 28, wherein the setting means sets the waiting time based on a buffer size of the buffer means.

30. (New) The method according to claim 22, further comprising setting a waiting time required for the writing process,

wherein a notification that the operation is not permitted is notified when the waiting time has not elapsed after the detection of the user action and a notification that the operation is permitted is notified when the waiting time has elapsed after the detection of the user action.

31. (New) The method according to claim 30, wherein the waiting time is set based on a buffer size of the buffer means.

32. (New) The device according to claim 15, wherein the detecting means detects the user action in a case where a cover to prevent the operation to cut off the power supply is moved from a predetermined position.